

ABSTRACT

An optical fiber splicer includes a pair of retainers for retaining optical fibers to be spliced, a block formed with a groove of V-shaped cross-section, and abutment and pressure-contact mechanism for sliding terminal portions of the optical fibers in mutually opposite directions along the groove, producing substantially equal elastic forces in the terminal portions, bringing the terminal portions into abutment, and bringing the abutted terminal portions into pressure contact. An optical fiber splicing method includes a step of sliding terminal portions of optical fibers to be spliced along a groove of V-shaped cross-section in mutually opposite directions and producing substantially equal elastic forces in the terminal portions, and a step of bringing the terminal portions into abutment and then bringing the abutted terminal portions into pressure contact. An optical fiber splice structure includes terminal portions of optical fibers spliced in a groove of V-shaped cross-section under pressure contact and exertion of substantially equal elastic forces.